

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) Apparatus for treating a raw feed containing ions, comprising:

an electromembrane device having means for conveying the raw feed thereto and treated feed therefrom, an anode, a cathode, an electrolyte solution and means for conveying at least one stream of the electrolyte solution between the cathode and anode which are arranged to apply an electric current to drive electrodeionisation in the electromembrane device for removal of the ions from the raw feed into a stream of concentrate, wherein the raw feed is not in direct contact with the anode or the cathode; and

means for transferring selected ions from the stream of the electrolyte solution into the stream of concentrate upon application of the current[[]],

wherein the stream of the electrolyte solution is separate from the stream of concentrate.

2. (Previously Presented) The apparatus according to claim 1, wherein the means for transferring selected ions comprises an anion exchange membrane adjacent the cathode and/or a cation exchange membrane adjacent the anode.

3. (Previously Presented) The apparatus according to claim 2, wherein each said

4. (Previously Presented) The apparatus according to claim 2, wherein each said membrane is in electrical contact with an electrode by means of a liquid permeable ion conducting material.

5. (Previously Presented) The apparatus according to claim 4, wherein the liquid permeable ion conducting material comprises one or more selected from an ion exchange resin, ion exchange fibres and an ion exchange foam.

6. (Previously Presented) The apparatus according to claim 5, there being a liquid permeable anion conducting material in contact with the cathode and a liquid permeable cation conducting material in contact with the anode.

7. (Currently Amended) The apparatus according to claim 1, wherein the means for transferring selected ions from the stream of the electrolyte solution to the stream of concentrate is adapted to transfer anions only.

8. (Currently Amended) The apparatus according to claim 1, wherein the means for transferring selected ions from the stream of the electrolyte solution to the stream of concentrate is adapted to transfer cations only.

9. (Currently Amended) The apparatus according to claim 1, wherein the means for

transferring selected ions from the stream of the electrolyte solution to the stream of

concentrate is adapted to transfer both cations and anions.

10. (Cancelled)

11. (Cancelled)

12. (Previously Presented) The apparatus according to claim 1, wherein the electrolyte solution comprises distilled water.

13. (Previously Presented) The apparatus according to claim 1, wherein the means for conveying at least one stream of electrolyte solution comprises means for conveying a first stream between the cathode and the anode in contact with the cathode, and means for conveying a second stream between the cathode and the anode in contact with the anode.

14. (Previously Presented) The apparatus according to claim 1, wherein the means for conveying at least one stream of electrolyte solution comprises means for recirculating the electrolyte solution between the cathode and the anode.

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Previously Presented) The electromembrane device according to claim 1, being part of a waste fluoride treatment system.

19. (Withdrawn) A process for removing ionisable impurities from an electrolyte solution in an electromembrane device, comprising providing means adapted to transfer selected ions from the electrolyte solution to a separate stream on application of a current to the device, conveying at least one stream of electrolyte solution between an anode and a cathode of the device, and applying a said current.

20. (Withdrawn) A process according to claim 19, including the step of providing means adapted to transfer anions only.

21. (Withdrawn) A process according to claim 19, including the step of providing means adapted to transfer cations only.

22. (Withdrawn) A process according to claim 19, including the step of providing means adapted to transfer both anions and cations.

23. (Withdrawn) A process according to any of claims 19 to 22, including the step of transferring the selected ions to a concentrate stream of the electromembrane device.

24. (Withdrawn) A process according to any of claims 19 to 23, including the step of conveying between the anode and the cathode at least one stream of electrolyte

25. (Withdrawn) A process according to any of claims 19 to 24, wherein the electrolyte solution is recirculated between the cathode and the anode.

26. (Withdrawn) An electromembrane process, including the step of operating a process according to any of claims 19 to 25.

27. (Withdrawn) An electromembrane process according to claim 26, being an electrodcionisation and/or electrodialysis process.

28. (Withdrawn) An electromembrane process according to claim 26 or claim 27, being part of a liquid waste treatment process.

29. (Withdrawn) An electromembrane process according to any of claims 26 to 28, being part of a waste fluoride treatment process.